

REMARKS

Claims 1, 46-54 and 56-70 are pending. By this Amendment, claims 1, 49, 53, 56, 57, 60, 62 and 66 have been amended, claim 55 have been canceled without prejudice to or disclaimer of the subject matter contained therein, and claims 69-70 have been added.

The attached Appendix includes a marked-up copy of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Applicants appreciate the courtesies extended by Examiner Nghiem to Applicants' representative during the August 6, 2002 personal interview. The points discussed during the interview are incorporated into the remarks below and constitute Applicants' record of the interview.

Claims 1 and 46-68 were rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-17 of Sasaki et al., U.S. Patent No. 6,270,207 in view of Takagi, U.S. Patent No. 5,877,794. Attached hereto is a Terminal Disclaimer disclaiming the terminal portion of any patent issued on this application that extends beyond the term of Sasaki. It is respectfully requested that the rejection be withdrawn.

Claims 56-61 and 66-68 were rejected under 35 U.S.C. §112, second paragraph. By this Amendment, Applicants amend claims 56 and 60 responsive to the rejection of claims 56-61. With regard to the rejection of claims 66-68, Applicants amend claim 66, as discussed during the interview, to more clearly recite the path of claim 66 in view of Applicant pages 49-52 of the specification and Figures 11-13, for example. Applicants clarify that the path 16 is formed in the upper cover member 3 and connects the first chamber 9 and atmosphere connection chamber 11, wherein the path 16 and the first chamber 9 are connected via a surface (surface in which both the path 16 and first chamber 9 are connected as shown in Figs. 12 and 13, for example) which does not contain an

intersection line formed by two surfaces (intersection lines E1-E4 as shown in Fig. 11, for example). It is respectfully requested the rejection be withdrawn.

Claims 1, 46, 47, 49, 56 and 57 were rejected under 35 U.S.C. §102(b) over Shinada et al. (Shinada), U.S. Patent No. 5,790,158 and claims 62-65 were rejected under 35 U.S.C. §103(a) over Shinada in view of Takagi.

As discussed during the personal interview, Shinada fails to teach, disclose or suggest Applicants' ink cartridge with an ink filling hole communicating with a second chamber and a pressure reduction hole communicating with a first chamber as recited in Applicants' claim 1, a second partitioning wall as recited in Applicants' claim 56 or a hole formed in the upper case surface, the hole communicating with the second chamber such that the ink is filled in the first chamber through the second chamber from the ink filling hole as recited in Applicants' claim 62 as well as other features recited in claims 1, 56 and 62.

As discussed during the interview, Shinada fails to disclose Applicants' claimed invention because Shinada's ink filling ports 514 and 515 are both directly connected to the foam chamber 511. Also, only one partitioning wall 510 is disclosed (Fig. 15A).

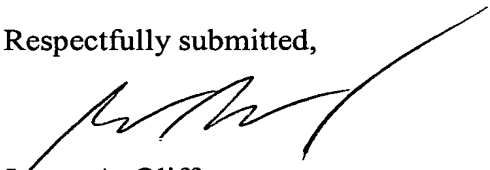
Takagi fails to overcome the deficiencies of Shinada because Takagi also fails to teach, disclose or suggest the combinations recited in Applicants' claims 1, 56 and 62.

In addition, claims 46, 47, 49, 57 and 63-65 recite additional features of the invention and are also believed to be allowable at least for the reasons discussed above with respect to claims 1, 56 and 62, and for the additional features recited therein. It is respectfully requested the rejections be withdrawn.

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 46-54 and 56-70 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



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Attachment:
Appendix

Date: August 9, 2002

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<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>

APPENDIX

Changes to Claims:

Claim 55 is canceled.

The following is a marked-up version of the amended claims:

1. (Twice Amended) An ink cartridge for holding ink, comprising:

- a case having a first surface on the outside of the case and a second surface on the outside of the case in mutual opposition, the first surface being open;
- a first cover for covering the first surface;
- a partitioning wall for separating the interior of the case into a first chamber and a second chamber, respectively, for holding the ink;
- a porous material accommodated in the first chamber;
- an ink filling hole formed in the first cover ~~for filling the first chamber and the second chamber with ink,~~ the ink filling hole communicating with the second chamber; and
- a pressure reduction hole formed in the first cover ~~for reducing the pressure in the first chamber and the second chamber, wherein the first chamber and the second chamber are connected near the second surface inside the case,~~ the pressure reduction hole communicating with the first chamber, wherein the first chamber and the second chamber communicate with each other near the second surface inside the case such that the ink is filled in the first chamber through the second chamber from the ink filling hole.

49. (Amended) ~~An ink cartridge removably attached to a recording head for holding ink supplied to the recording head, comprising:~~

- ~~———— a case having a first surface on the outside of the case and a second surface on the outside of the case in mutual opposition and containing ink therein, wherein:~~
- ~~———— an ink filling hole for filling the case with ink and a pressure reduction hole for reducing the pressure inside the case are formed in the first surface;~~
- ~~———— an ink supply hole for supplying ink to the recording head is formed in the second surface;~~

~~_____The ink cartridge according to claim 46, wherein the ink filling hole and the pressure reduction hole are closed off by a first sealing material applied to the first surfacecover; and~~

~~the ink supply-discharge hole is closed off by a second sealing material applied to the second surface so that the second sealing material can be peeled away.~~

53. (Amended) An ink cartridge for holding ink supplied to a recording head, comprising:

a case having a first surface on the outside of the case and a second surface on the outside of the case in opposition, the first and second surfaces are open;

a partitioning wall for separating the interior of the case into an ink chamber for holding ink and an atmosphere connection path communicating to the outside of the case, wherein the ink chamber is open on the first surface and the second surface sides; and

a first cover for covering the first surface of the case so that a path is formed for communicating between the ink chamber and the atmosphere connection path;

~~_____a second cover for covering the second surface of the case; and~~

~~_____an ink supply hole joined to the recording head, formed in the second cover so as to communicate with the ink chamber.~~

56. (Amended) An ink cartridge for holding ink supplied to a recording head, comprising:

a cartridge case having a first side wall and a second side wall opposed to the first side wall;

a first partitioning wall positioned substantially parallel to the first side wall of the case so as to separate the interior of the cartridge case into a first chamber and a second chamber for respectively accommodating ink; and

a second partitioning wall positioned substantially parallel to the first side wall of the case for separating the interior of the case into ~~a~~the first chamber and an atmosphere connection path for communicating with an atmosphere outside the case, wherein one end of the second chamber communicates with one end of the first chamber, one end of the

atmosphere connection path communicates with the other end of the first chamber and the other end of the atmosphere connection path is open to the outside of the case.

57. (Amended) The ink cartridge according to claim 56, wherein the atmosphere connection path is ~~divided~~ formed between the first side wall and the second partitioning wall, and the second chamber is ~~divided~~ formed between the second side wall and the first partitioning wall.

60. (Amended) The ink cartridge according to claim ~~59~~ 57, further comprising, inside the case, a third partitioning wall that is joined to the lower ends of the first partitioning wall and the second partitioning wall while extending in a direction substantially perpendicular to the first side wall, wherein the first chamber is divided by the second and third partitioning walls, and a connecting hole for connecting the first and second chambers is formed in the third partitioning wall.

62. (Amended) An ink cartridge removably attached to a recording head for holding ink supplied to the recording head, comprising:

a cartridge case having an upper case surface on the outside of the case and a lower case surface on the outside of the case;

a partitioning wall for dividing the inside of the case into a first chamber and a second chamber ~~chambers-chamber~~ for accommodating ink, respectively, wherein the first chamber and the second chamber ~~chambers-chamber~~ mutually communicate with each other near the lower case surface;

a hole formed in the upper case surface, the hole communicating with the second chamber such that the ink is filled in the first chamber through the second chamber from the ink filling hole;

~~a sealing material for closing off the hole~~;

an ink supply hole for supplying ink to the recording head from the second chamber, formed in the lower case surface; and

an atmosphere connection hole formed in the upper case surface for connecting the first chamber to an atmosphere outside of the cartridge, wherein the second

chamber is formed between one side wall of the case and the partitioning wall and at least one portion of the one side wall is transparent or semi-transparent.

66. (Amended) An ink cartridge for holding ink, comprising:

a cartridge case having an upper case surface on the outside of the case and a lower case surface on the outside of the case;

a partitioning wall for separating the interior of the cartridge case into a first chamber for holding ink and an atmosphere connection chamber for communicating with an atmosphere outside the case on the upper case surface, one end of the wall is joined to the upper case surface; and

a path for connecting the first chamber and the atmosphere connection chamber, formed in the upper case surface, wherein the path and the first chamber are connected via ~~a portion of a surface~~ which does not contain an intersection line formed by the intersection of ~~a surface and a surface~~ two surfaces.

Claims 69 and 70 are added.